

Comparisons of Job Characteristics

Focus Occupation: Medical and Clinical Laboratory Technologists (29-2011)

Associated Occupation: Epidemiologists (19-1041)

[Compare Knowledge](#)

[Compare Skills](#)

[Compare Abilities](#)

[Compare Detailed Work Activities](#)

[Compare Tools and Technologies](#)

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

Knowledge

Similarity of Focus Occupation to Associated Occupation: 64

Focus Occupation: Medical and Clinical Laboratory Technologists (29-2011)

Associated Occupation: Epidemiologists (19-1041)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Mathematics	9.2	18.7	8.3	<<	Extensive education and/or training may be required
English Language	11.2	17.6	10.3	<<	Extensive education and/or training may be required
Biology	3.7	16.5	16.7	0	Current knowledge level may be sufficient
Medicine and Dentistry	3.7	12.7	10.1	<	Expanded education and/or training may be required
Sociology and Anthropology	4.1	11.6	2.3	<<	Extensive education and/or training may be required
Geography	3.9	8.8	1.5	<<	Extensive education and/or training may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Skills

Similarity of Focus Occupation to Associated Occupation: 81

Focus Occupation: Medical and Clinical Laboratory Technologists (29-2011)

Associated Occupation: Epidemiologists (19-1041)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Science	4.5	18.2	10.9	<<	Extensive development of skills in this area may be required
Reading Comprehension	10.7	16.7	12.9	<<	Extensive development of skills in this area may be required
Active Listening	11.0	14.6	11.5	<<	Extensive development of skills in this area may be required
Critical Thinking	10.8	14.6	11.7	<	A higher skill level may be required

Writing	9.2	14.3	10.2	<<	Extensive development of skills in this area may be required
Complex Problem Solving	9.1	13.9	9.5	<<	Extensive development of skills in this area may be required
Judgment and Decision Making	9.4	13.9	10.0	<<	Extensive development of skills in this area may be required
Monitoring	9.9	13.3	10.1	<<	Extensive development of skills in this area may be required
Active Learning	8.7	13.0	9.7	<<	Extensive development of skills in this area may be required
Coordination	9.1	11.8	8.8	<<	Extensive development of skills in this area may be required
Systems Analysis	6.5	11.8	6.8	<<	Extensive development of skills in this area may be required
Systems Evaluation	6.4	11.5	6.0	<<	Extensive development of skills in this area may be required
Mathematics	6.2	11.0	8.0	<<	Extensive development of skills in this area may be required
Operations Analysis	5.0	9.5	2.3	<<	Extensive development of skills in this area may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Abilities

Similarity of Focus Occupation to Associated Occupation: 85

Focus Occupation: Medical and Clinical Laboratory Technologists (29-2011)
Associated Occupation: Epidemiologists (19-1041)

Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Oral Comprehension	12.5	16.4	13.4	<	Some improvement in abilities may be required
Problem Sensitivity	11.1	16.2	13.0	<<	Extensive improvement in abilities may be required
Written Comprehension	11.0	16.0	12.7	<<	Extensive improvement in abilities may be required
Oral Expression	12.4	15.7	13.0	<	Some improvement in abilities may be required
Inductive Reasoning	10.2	15.2	12.4	<	Some improvement in abilities may be required
Written Expression	9.8	15.0	10.7	<<	Extensive improvement in abilities may be required
Deductive Reasoning	10.6	14.6	12.2	<	Some improvement in abilities may be required
Category Flexibility	9.0	12.2	11.2	0	Current ability level may be sufficient
Fluency of Ideas	7.6	11.8	7.2	<<	Extensive improvement in abilities may be required
Mathematical Reasoning	6.3	11.5	7.6	<<	Extensive improvement in abilities may be required
Number Facility	6.3	11.0	7.3	<<	Extensive improvement in abilities may be required
Memorization	5.6	8.4	6.0	<<	Extensive improvement in abilities may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Activities that Both Occupations Have in Common

Similarity of Focus
Occupation to Associated
Occupation: 89

Focus Occupation: Medical and Clinical Laboratory Technologists (29-2011)
Associated Occupation: Epidemiologists (19-1041)

Work Activities	Exclusivity of Activity
Adhere to safety procedures	12
Analyze biological research, test, or analysis data	70
Analyze chemical experimental, test, or analysis data or findings	69
Analyze medical data	57
Analyze scientific research data or investigative findings	27
Calculate medical diagnostic test results	89
Collect scientific or technical data	30
Collect statistical data	47
Communicate technical information	4
Conduct analyses or tests of biological material samples	85
Conduct analyses or tests of organic compounds	71
Conduct laboratory research or experiments	57
Conduct medical laboratory tests	87
Conduct standardized qualitative laboratory analyses	62
Conduct standardized quantitative laboratory analyses	62
Cultivate micro-organisms for study, testing, or medical preparations	84
Develop policies, procedures, methods, or standards	21
Direct and coordinate activities of workers or staff	3
Direct implementation of new procedures, policies, or programs	60
Examine biological or other material specimens under microscope	73
Explain complex mathematical information	30
Follow infectious materials procedures	52
Isolate and identify micro-organisms	82
Perform statistical analysis	71
Prepare reports	8
Record test results, test procedures, or inspection data	48
Research human or animal disease	77
Use biological research techniques	68
Use chemical testing or analysis procedures	54
Use computers to enter, access or retrieve data	3
Use hazardous materials information	35
Use health or sanitation standards	62
Use knowledge of investigation techniques	16
Use knowledge of medical terminology	40
Use library or online Internet research techniques	21

Use mathematical or statistical methods to identify or analyze problems	30
Use medical lab techniques	81
Use microscope	71
Use quantitative research methods	35
Use relational database software	26
Use research methodology procedures in health care	63
Use sanitation practices in health care settings	48
Use scientific research methodology	21
Use spreadsheet software	18
Use word processing or desktop publishing software	17

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Tools and Technologies that Both Occupations Have in Common

Similarity of Focus
Occupation to Associated
Occupation: 76

Focus Occupation: Medical and Clinical Laboratory Technologists (29-2011)
Associated Occupation: Epidemiologists (19-1041)

Tools and Technologies	Exclusivity
Computers	1
Content authoring and editing software	1
Data management and query software	1
Industry specific software	1
Information exchange software	1

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.